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Name: Fang Elizondo 10/23/2006  
[Signature] Date

**Petitioner's Docket No.: FERN-P001C**  
**PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Fernandez, Dennis S.  
Application No.: 09/823,509  
Filed: 03/29/2001

Art Unit: 2621  
Examiner: Vo, Tung T

**For: Integrated Network for Monitoring Remote Objects**

Commissioner for Patents  
P.O. Box 1450.  
Alexandria, VA 22313-1450  
**ATTN: MAIL STOP APPEAL BRIEF-PATENTS**

**TRANSMITTAL OF APPEAL BRIEF  
(PATENT APPLICATION – 37 CFR 1.992)**

1. Transmitted herewith, in triplicate, is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on August 24, 2006.
2. STATUS OF APPLICANT

This is on behalf of

- ☐ Other than a small entity  
☒ Small entity

A statement:

- ☐ is attached  
☒ was already filed.

3. FEE FOR FILING APPEAL BRIEF

Pursuant to Patent Appeals, the fee for filing the Appeal Brief is:  
☒ Small entity  
\$250.00



☐ Other than a small entity  
\$500.00

Pursuant to Patent Appeals, the fee for request for Oral Hearing is:

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Appeal Brief fee Due \$250.00

4. Extension of Time Fees

(a) ☐ Applicant petitions for an extension of time under 37 C.F. R. 1.136 for the total number of months checked below (fees pursuant to 37 C.F.R. 1.17(a)-(d).

<u>Extension of Time</u>	<u>Large Entity Fee</u>	<u>Small Entity Fee</u>
<input type="checkbox"/> One (1) month .	_____ \$ 120.00	_____ \$ 60.00
<input type="checkbox"/> Two (2) month .	_____ \$ 450.00	_____ \$ 225.00
<input type="checkbox"/> Three (3) month .	_____ \$ 1020.00	_____ \$ 510.00
<input type="checkbox"/> Four (4) month .	_____ \$ 1,590.00	_____ \$ 795.00
<input type="checkbox"/> Five (5) month .	_____ \$ 2,160.00	_____ \$ 1080.00

Fee: \$ \_\_\_\_\_

If an additional extension of time is required, please consider this petition thereof.

☐ An extension for \_\_\_\_\_ months has already been secured, and the fee paid therefore of \$ \_\_\_\_\_ is deducted from the total fee due for the total months of extension is now requested.

**Extension fee due with this request \$ \_\_\_\_\_**

**or**

(b) ☒ Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

5. TOTAL FEE DUE

The total fee due is:

Appeal Brief Fee      \$250.00  
Extension Fee (if any) \$ 0.00

6. FEE PAYMENT

[ ] A Check No. \_\_\_\_\_ for the above-specified full fee is enclosed. However, in case Applicant inadvertently miscalculated any required fee, the Commissioner is hereby authorized to charge the necessary additional amount associated with this communication or credit any overpayment to **Deposit Account No: 500482**. A duplicate copy of this authorization is enclosed.

[X] Charge Account No. **500482** the sum of \$ 250.00.  
A duplicate of this transmittal is attached.

7. FEE DEFICIENCY

[ X] If any additional extension and/or fee is required, this is a request therefore and to charge to Account No. 500482.

[ ] If any additional fee for claims is required, charge Account No. \_\_\_\_\_

Please direct all correspondence concerning the above-identified application to the following Custom Number and Address:

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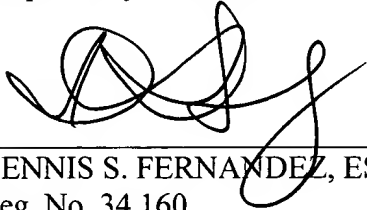
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10/23/2006  
Date



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS AND INTERFERENCES**

Inventors: Fernandez, et al. )  
Application No. 09/823,509 )  
Filed: 03/29/2001 )  
For: INTEGRATED NETWORK )  
FOR MONITORING REMOTE )  
OBJECTS )

Attorney Docket No.: FERN-P001C

Examiner: Vo, Tung T

Art Unit: 2621

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPEAL BRIEF**  
**IN SUPPORT OF APPELLANTS' APPEAL**  
**TO THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Appellants hereby submit the following Appeal Brief pursuant to 37 CFR 41.37 and fee set forth in § 41.20(b)(2), in support of an appeal from the final rejection by the Examiner, dated May, 24 2006 and advisory action dated June 23, 2006, in the above-captioned case. Appellants filed a notice of appeal under § 41.31 on August 24, 2006. Also, Appellants assert that the following brief does not include any new or non-admitted amendment, affidavit, or other evidence. Appellants respectfully request consideration of this appeal by the Board of Patent Appeals and Interferences for allowance of the above-captioned patent application.

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A. The Examiner has clearly failed to provide a basis or rationale for the rejection of Claim 3, therefore Examiner has not established a <i>prima facie</i> case of obviousness under 35 U.S.C. 103(a).	
B. The Examiner has not provided sufficient evidence of <i>prima facie</i> obviousness under §103(a) for the rejection of Claims 1-3, 5-12, 14-16, 18-21, and 23 as unpatentable over the prior art of Rauber in combination with Woolston.	
C. The Examiner has made contradictory and incorrect statements and thus has improperly rejected claims 1-3, 5-12, 14-16, 18-21, and 23 under 35 U.S.C. 103(a) as being unpatentable over Rauber and Woolston.	
D. Without establishing a <i>prima facie</i> case for the §103(a) obviousness combination of Rauber and Woolston, Examiner has not established that Claims 13, 17, and 22 are unpatentable over Rauber and Woolston in view of Durbin et al., and that Claim 4 is unpatentable in view of Kennedy.	
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**I. Real party in interest**

The real party in interest is Dennis Fernandez, an individual, having a residence at 1175 Osborn Avenue, Atherton, CA 94027.

**II. Related appeals and interferences**

Related proceedings to this application include parent US Patent No. 6,697,103 and divisional Application Nos. 09/823,089, 09/823,506, and 09/823,508 with continuation application number 11/394,554. To the best of Appellant's knowledge, there are no other prior or pending appeals, judicial proceedings or interferences known to the appellant which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**III. Status of Claims**

In Examiner's Advisory Action Before the Filing of an Appeal Brief, mailed June 23, 2006, all claims 1-23 were **rejected**. Claims 1-23 are currently pending in this proceeding, Claims 1, 11 and 20 being independent claims. These pending claims, 1-23, are being appealed, and are appended herewith in the **Claims appendix**.

**IV. Status of Amendments**

In the Final Office Action mailed May 24, 2006, Examiner rejected claims 1-23. Subsequent to this final rejection, Applicant responded with an amendment filed June 2, 2006. Examiner **entered** the proposed amendments, in the Advisory Action mailed June

23, 2006, while affirming the rejection of claims 1-23. All pending claims 1-23 on appeal are provided in the **Claims appendix**, as filed in the June 2 amendment.

#### **V. Summary of claimed subject matter**

The subject matter of the invention, defined in independent claims 1, 11 and 20, pertains to goods inventory management via the internet and through utilizing fixed detectors and mobile sensors. Monitored objects are represented with a data structure comprising of 1) an object identifier representing one or more goods in production, inventory and shipment; 2) a first object location and time, provided by a detector coupled to the console processing unit; and 3) a second object location and time, provided by a sensor coupled to the console processing unit. Additionally, the invention discloses a method for processing such data structure and the utilization of a single-chip integrated circuit for doing so.

Security is addressed in the invention as an access means processes the data structure securely using a digital certificate, watermark or encryption key. This security feature assures that such data structure is accessible for object-monitoring from only one or more specified network site or processor. Control software is implemented in order to provide the data structure automatically and for network surveillance in response to user search query. Furthermore, such software is comprised of numerous components including a network and data communication module, and object and map database, an object movement processing module, a security management module, an electronic transaction processing module, a diagnosis tool, and a performance report updater module. Also included is a visual object analyzer module comprising a neural network or

simulation program for recognizing adaptively one or more identified goods for real-time tracking of multiple goods movement, whereby such modules are functionally integrated to enable surveillance-based commercial transaction using the data structure.

## **VI. Grounds of rejection to be reviewed on appeal**

- A. Whether claims 1-3, 5-12, 14-16, 18-21, and 23 are unpatentable under 35 U.S.C. 103(a) over Rauber et al. (US 6,182,053) in view of Woolston (US 5,845,265).
- B. Whether claims 13, 17, and 22 are unpatentable under 35 U.S.C. 103(a) over Rauber et al. (US 6,182,053) in view of Woolston (US 5,845,265) as applied to claims 1, 11, and 20, and further in view of Durbin et al. (US 6,039,258).
- C. Whether claim 4 is unpatentable under 35 U.S.C. 103(a) over Rauber et al. (US 6,182,053) in view of Woolston (US 5,845,265) as applied to claim 1, and in further view of Kennedy (US 6,301,480).

## **VII. Argument**

- A. The Examiner has clearly failed to provide a basis or rationale for the rejection of Claim 3, therefore Examiner has not established a *prima facie* case of obviousness under 35 U.S.C. 103(a).**

In order to establish a *prima facie* case of obviousness, the prior art references when combined must teach or suggest all the claim limitations. *See*, MPEP 706.02(j). Examiner begins the rejection of Appellant's invention by concluding that claims 1-3, 5-12, 14-16, 18-21, and 23 are unpatentable under 35 U.S.C. 103(a) over Rauber et al. (US



6,182,053) in view of Woolston (US 5,845,265). Thereafter, Examiner states Appellant's claim language in each of said claims with reference to specific figures and text of Rauber and Woolston. However, Examiner has failed to indicate which prior art reference and more specifically, where in that reference the language of Claim 3 is taught. Nowhere in Examiner's argument is there provided a reference to prior art which teaches, "a position signal being generated by the detector coupled to the monitored object when such object is moveable within an observable range, a visual signal being generated by the sensor uncoupled to such object in the observable range," (Appellant's Claim 3).

Where a reference is relied on to support a rejection, whether or not in a minor capacity, that reference should be positively included in the statement of the rejection. *In re Hoch*, 428 F.2d 1341, 1342 (C.C.P.A. 1970). Additionally, MPEP 706.02(j) sets forth the contents of an Examiner's 35 U.S.C. 103 rejection as including, "the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate." In addressing Appellant's specific claim language that pertains to Rauber and similarly in addressing Appellant's specific claim language that pertains to Woolston, Examiner has failed to indicate the proper citation as to where the alleged §103(a) rejection of Claim 3 is based. MPEP 706.02(j) states that, "[i]t is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given a fair opportunity to reply."

Appellant argues that Examiner has provided no basis for rejection under §103(a) due to the failure to cite in the prior art references the alleged teaching of Claim 3's

language. Examiner has merely asserted rejection of Claim 3. Therefore, without rationale for the §103(a) rejection of Claim 3, Examiner has not proven that the prior art references teach or suggest all the claim limitations under MPEP 706.02(j), and thus has failed to establish a *prima facie* case of obviousness.

**B. The Examiner has not provided sufficient evidence of *prima facie* obviousness under §103(a) for the rejection of Claims 1-3, 5-12, 14-16, 18-21, and 23 as unpatentable over the prior art of Rauber in combination with Woolston.**

On appeal to the Board, an applicant can overcome a rejection by showing insufficient evidence of *prima facie* obviousness. *In re Rouffett*, 149 F.3d 1350, 1355 (Fed. Cir. 1998). Examiner has argued that Claims 1-3, 5-12, 14-16, 18-21, and 23 are a combination of elements found in Rauber and Woolston. It is known that most, if not all, inventions are combinations and mostly of old elements. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1540 (Fed. Cir. 1983). In demonstrating the combination, Examiner has merely identified relevant text and figures in both Rauber and Woolston that correspond to Appellant's Claim language. However, the court has held that mere identification of each element in the prior art is insufficient to defeat the patentability of the combined subject matter as a whole. *Rouffett*, 149 F.3d at 1355, 1357. To establish a *prima facie* case of obviousness based on a combination of elements disclosed in the prior art, the Examiner must articulate the basis on which it concludes that it would have been obvious to make the claimed invention. *Id.* Specifically, Examiner must "explain the reasons why one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious." *Id.* at 1359.

In detail, this “motivation-suggestion-teaching” test asks not merely what the references disclose, but whether a person of ordinary skill in the art, possessed with the understandings and knowledge reflected in the prior art, and motivated by the general problem facing the inventor, would have been led to make the combination recited in the claims. *See, Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1321-24 (Fed. Cir. 2005).

In order to find evidence of such motivation, suggestion or teaching, the court has recommended three places: 1) the content of the public prior art; 2) the nature of the problem addressed by the invention; or 3) the knowledge of one of ordinary skill in the art. *See, SIBA Neurosciences, Inc. v. Cadus Pharm. Corp.*, 225 F.3d 1349, 1356 (Fed. Cir. 2000). Examiner has presumably addressed the second place, the nature of the problem addressed by the invention. In determining whether the nature of the problem addressed by the invention supplies a motivation to combine certain prior art references, the court has engaged in a detailed analysis of the nature of the problem solved by the invention. *See, Princeton Biochemicals, Inc. v. Beckman Coulter, Inc.*, 411 F.3d 1332, 1338-39 (Fed. Cir. 2005). Here the Examiner has not even begun to provided detailed analysis of the sort of problem addressed by Appellant’s invention. Instead, Examiner briefly states that the alleged motivation to combine Rauber and Woolston by one of ordinary skill in the art would allow for, “observing goods with its price during inventory,” and “allow the user to easily set up his or her own warehouse, store, or retailer for buying and selling goods via the Internet.” In other words, Examiner is arguing that the nature problem addressed by Appellant’s invention is the setting up of warehouses for internet sales and observing goods with price during inventory.

Examiner argues the combination of Rauber and Woolston is motivated because it allows the user to “*easily* set up” such internet retail operations. Appellant argues that such reasoning is flawed.

First, Examiner misses the point of the nature of the problem addressed by Appellant’s invention. In short, Appellant’s invention deals with the problem of goods inventory management via the internet and through utilizing fixed detectors and mobile sensors, not the problem as stated by Examiner. Furthermore, if a person of ordinary skill in the art was faced with the problem as articulated by Examiner of setting up warehouses for internet sales with observation of goods with price during inventory, and that such person wanted to solve this problem “*easily*” as examiner states, they would not need to combine Rauber and Woolston. One would merely need to utilize the prior art as taught by the Woolston patent. In this patent, Woolston teaches a method for creating a “computerized market for used and collectible goods,” i.e., Internet sales. Also, Woolston teaches a method to allow the “purchaser to change the price of the good once the purchaser has purchased the good thereby to allow the purchaser to speculate on the price.” In fact, this patent allowed Woolston to found the company MercExchange, L.L.C in 2001 and successfully commercialize this on-line auction technology. The Woolston patent essentially solved the problem of setting up warehouses for internet sales with observation of goods with price during inventory. Appellant stresses that Woolston was able to do this solely in reliance on his own patented invention and without the combination of the Rauber patent. Therefore, a person of ordinary skill in the art faced with the problem of “*easily*” setting up warehouses for internet sales with

observation of goods with price during inventory would only need to utilize the Woolston patent.

Furthermore, Appellant argues that a person of ordinary skill in the art would not rely on the Rauber patent to solve such a problem. It has been long established by the court that in order to be considered in a §103(a) obviousness analysis, prior art references must be analogous art. *See, Application of Antle*, 444 F.2d 1168 (C.C.P.A. 1971). The characteristic of being analogous refers to the prior art that courts deem, as a matter of law, a person having ordinary skill in the art would reasonably have consulted in solving the problem addressed by the claimed invention. Rauber is non-analogous art to the problem, as articulated by Examiner, of “easily” setting up warehouses for internet sales with observation of goods with price during inventory. Rauber relates to managing distressed inventory, which is defined as inventory that is shipped by freight carriers which does not reach its intended destination, is not accepted by the buyer, accidentally loaded on the wrong freight truck, damaged, or simply marked improperly. Thus, it is evident that Rauber does not relate to the nature of the problem as articulated by Examiner. Therefore, Rauber is non-analogous prior art which does not address the particular problem of “easily” setting up warehouses for internet sales with observation of goods with price during inventory.

With only a need to utilize the Woolston patent to solve the nature of the problem as articulated by the Examiner, Appellant can find no teaching, suggestion or motivation to combine the prior art of Woolston with Rauber. Therefore, absent such findings, Appellant concludes that Examiner has stated insufficient evidence of *prima facie*

obviousness of Claims 1-3, 5-12, 14-16, 18-21 and 23 under §103(a), and as such Appellant's application should be allowed.

**C. The Examiner has made contradictory and incorrect statements and thus has improperly rejected claims 1-3, 5-12, 14-16, 18-21, and 23 under 35 U.S.C. 103(a) as being unpatentable over Rauber and Woolston.**

The language of independent Claims 1, 11 and 20 state in part, "a first object location and time monitored at such location, the first object location being provided by a *detector*," (italics added). In addressing this language, Examiner cites Rauber (fig. 2, items 212-218) and states that the warehouse would obviously have a *detector* for detecting the first object.

First, Appellant presumes that Examiner is arguing that the warehouse inherently has a detector. If that is the case, Examiner cannot merely assert such an inherency determination. Rather, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art." *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). Examiner has not done so here and thus has incorrectly stated that such warehouse in Rauber would, "obviously have a detector."

Second, after stating that such detector is obvious in the warehouse of Rauber, Examiner then states, "[i]t is noted that Rauber *does not* particularly teach Internet and at least one fixed *detector*." Here Examiner has done an about face – first in stating that Rauber would obviously have a detector, and then stating that Rauber does not have such detector. These are contradictory statements.

Therefore, Appellant argues that Examiner has improperly rejected claims 1-3, 5-12, 14-16, 18-21, and 23 under 35 U.S.C. 103(a) as being unpatentable over Rauber and Woolston and as such Appellant's application should be allowed.

**D. Without establishing a *prima facie* case for the §103(a) obviousness combination of Rauber and Woolston, Examiner has not established that Claims 13, 17, and 22 are unpatentable over Rauber and Woolston in view of Durbin et al., and that Claim 4 is unpatentable in view of Kennedy.**

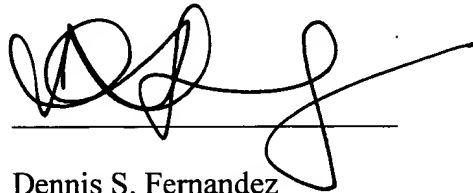
In rejecting claims 13, 17 and 22, Examiner relies on the combination of Rauber and Woolston with the prior art reference of Durbin et al. Appellant has previously argued, extensively, that there is no teaching, suggestion or motivation to combine the prior art of Woolston with Rauber, and thus Examiner has stated insufficient evidence for the *prima facie* obviousness combination of these prior art references under §103(a). Therefore, without a valid combination of Rauber and Woolston, Examiner's argument for rejecting Claims 13, 17 and 22 via incorporation of the teachings of Durbin into the combined system of Rauber and Woolston must fail. Similarly, with respect to Claim 4, Examiner's argument for the incorporation of the teachings of Kennedy into the system of Rauber and Woolston must also fail. In conclusion, claims 4, 13, 17 and 22 are patentable over the Rauber, Woolston, Durbin, and Kenney, and as such Appellant's application should be allowed.

**CONCLUSION**

For all of the reasons stated above, Appellant respectfully concludes that Examiner was in error to reject claims 1-3, 5-12, 14-16, 18-21, and 23 as being

unpatentable over Rauber et al. (US 6,182,053) in view of Woolston (US 5,845,265) under 35 U.S.C. 103(a); Examiner was in error to reject claims 13, 17, and 22 as being unpatentable over Rauber in view of Woolston as applied to claims 1, 11, and 20, and in further view of Durbin et al. (US 6,039,265) under 35 U.S.C. 103(a); and Examiner was in error to reject claim 4 as being unpatentable over Rauber in view of Woolston as applied to claim 1, and in further view of Kennedy (US 6,301,480) under 35 U.S.C. 103(a). Therefore, Appellant prays for careful consideration of this appeal by the Board of Patent Appeals and Interferences in order for the ultimate allowance of all Claims 1-23.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Dennis S. Fernandez', written over a horizontal line.

Dennis S. Fernandez  
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## VIII. Claims appendix

### **Claims Presented For Appeal** **(as filed via Rule-116 Amendment dated June 2, 2006)**

1. (PREVIOUSLY PRESENTED) In a console processing unit for goods inventory management coupled via the Internet to at least one fixed detector and at least one mobile sensor, a data structure for representing a monitored object, the data structure comprising:
  - an object identifier, such object identifier representing one or more goods in production, inventory and shipment;
  - a first object location and a time monitored at such location, provided by a detector coupled to the console processing unit; and
  - a second object location and a time monitored at such location, provided by a sensor coupled to the console processing unit;wherein an access means processes the data structure securely using a digital certificate, watermark or encryption key, such that the data structure is accessible for object-monitoring from only one or more specified network site or processor, the data structure being provided automatically using control software for network surveillance in response to a user search query, the software comprising a network and data communication module, an object and map database, an object movement processing module, a security management module, an electronic transaction processing module, a diagnosis tool, a performance report updater module, and a visual object analyzer module comprising a neural network or simulation program for recognizing adaptively one or more identified goods for real-time tracking of multiple goods movement, whereby such modules are

functionally integrated to enable surveillance-based commercial transaction using the data structure.

2. (PREVIOUSLY PRESENTED) The data structure of Claim 1 further comprising:

a scheduled object location and a time scheduled for such location.

3. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:

a position signal being generated by the detector coupled to the monitored object when such object is moveable within an observable range, a visual signal being generated by the sensor uncoupled to such object in the observable range.

4. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:

the detector comprises an accelerometer.

5. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:

a software agent associated with the monitored object accesses a database.

6. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:

the object identifier comprises an object name, an object group, an object query, an object condition, an object status, an object location, an object time, an object error, or an object image, video, or audio broadcast signal.

7. (PREVIOUSLY PRESENTED) The data structure of Claim 3 wherein:

the observable range is modifiable according to a rule set.

8. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:

the monitored object is monitored temporarily using an extrapolated or last-stored positional or visual signal.

9. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:

the monitored object is authenticated according to a voice pattern, a finger-print pattern, a handwritten signature, or a magnetic or smart-card signal.

10. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:

the monitored object is provided an electronic file comprising a book, a greeting card, a news report, a sports report, a stock report, an artwork, a research database, a personal list, a recorded or live voice or music transmission, an electronic tool, or a commercial transaction.

11. (PREVIOUSLY PRESENTED) In a console processing unit for goods inventory management coupled via the Internet to at least one fixed detector and at least one mobile sensor, a method for processing a data structure for representing a monitored object, the method comprising the step of:

transmitting to a processor in a network a data structure comprising an object identifier, such object identifier representing one or more goods in production,

inventory and shipment, a first object location and a time monitored at such location, the first object location being provided by a detector coupled to a console processing unit, and a second object location and a time monitored at such location, the second object location being provided by a sensor coupled to the console processing unit; wherein an access means processes the data structure securely using a digital certificate, watermark or encryption key, such that the data structure is accessible for object-monitoring from only one or more specified network site or processor, the data structure being provided automatically using control software for network surveillance in response to a user search query, the software comprising a network and data communication module, an object and map database, an object movement processing module, a security management module, an electronic transaction processing module, a diagnosis tool, a performance report updater module, and a visual object analyzer module comprising a neural network or simulation program for recognizing adaptively one or more identified goods for real-time tracking of multiple goods movement, whereby such one or more of such modules are functionally integrated to enable surveillance-based commercial transaction using the data structure.

12. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:

the sensor comprises a radio-frequency identification device for locating the identified goods, and the detector comprises a camera for observing such identified goods, thereby enabling the sensor and the detector to provide

corroborative surveillance of the identified goods within an observable range in which the sensor is mobile relative to the detector.

13. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:

the sensor comprises a sensor signal port for sensing a low-power or fuel condition of the identified goods, thereby enabling the console processing unit to indicate or warn a down period for using the identified goods.

14. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:

the detector comprises visual-analyzer means for recognizing adaptively the identified goods using a neural network or simulation program, thereby enabling secure inventory management of the identified goods.

15. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:

the data structure indicates in-stock availability of the identified goods for transacting shipment, and a tax-rate for transaction at the location of the identified goods.

16. (PREVIOUSLY PRESENTED) The method of Claim 11 wherein:

the sensor comprises a radio-frequency identification device for locating the identified goods, and the detector comprises a camera for observing such identified goods, thereby enabling the sensor and the detector to provide

corroborative surveillance of the identified goods within an observable range in which the sensor is mobile relative to the detector.

17. (PREVIOUSLY PRESENTED) The method of Claim 11 wherein:

the sensor comprises a sensor signal port for sensing a low-power or fuel condition of the identified goods, thereby enabling the console processing unit to indicate or warn a down period for using the identified goods.

18. (PREVIOUSLY PRESENTED) The method of Claim 11 wherein:

the detector comprises visual-analyzer means for recognizing adaptively the identified goods using a neural network or simulation program, thereby enabling secure inventory management of the identified goods.

19. (PREVIOUSLY PRESENTED) The method of Claim 11 wherein:

the data structure indicates in-stock availability of the identified goods for transacting shipment, and a tax-rate for transaction at the location of the identified goods.

20. (PREVIOUSLY PRESENTED) In a network for goods inventory management for coupling at least one fixed detector and at least one mobile sensor, a single-chip integrated circuit for processing a data structure for representing a monitored object, the circuit comprising:

a processor provided in a wireless target unit for transmitting or receiving in a network a data structure comprising an object identifier, such object identifier representing one or more goods in production, inventory and shipment, a first object location and a time monitored at such location, the first object location being provided by a detector, and a second object location and a time monitored at such location, the second object location being provided by a sensor; wherein an access means processes the data structure securely using a digital certificate, watermark or encryption key, such that the data structure is accessible for object-monitoring from only one or more specified network site or processor, the data structure being provided automatically using control software for network surveillance in response to a user search query, the software comprising a network and data communication module, an object and map database, an object movement processing module, a security management module, an electronic transaction processing module, a diagnosis tool, a performance report updater module, and a visual object analyzer module comprising a neural network or simulation program for recognizing adaptively one or more identified goods for real-time tracking of multiple goods movement, whereby one or more of such modules are functionally integrated to enable surveillance-based commercial transaction using the data structure.

21. (PREVIOUSLY PRESENTED) The circuit of Claim 20 wherein:

the sensor comprises a radio-frequency identification device for locating the identified goods, and the detector comprises a camera for observing such

identified goods, thereby enabling the sensor and the detector to provide corroborative surveillance of the identified goods within an observable range in which the sensor is mobile relative to the detector.

22. (PREVIOUSLY PRESENTED) The circuit of Claim 20 wherein:

the sensor comprises a sensor signal port for sensing a low-power or fuel condition of the identified goods, thereby enabling indication or warning of a down period for using the identified goods.

23. (PREVIOUSLY PRESENTED) The circuit of Claim 20 wherein:

the detector comprises visual-analyzer means for recognizing adaptively the identified goods using a neural network or simulation program, thereby enabling secure inventory management of the identified goods.



**VIII. Evidence appendix**

None.

**X. Related proceedings appendix**

None.